

IN THE CLAIMS:

1. (currently amended) A system for prioritizing debt collections for a collector having customers with debt, the debt relating to an item acquired by a customer, said system comprising:

at least one computer;

a server configured to:

receive data from the at least one computer relating to items associated with debt collections;

generate a collection priority value for each item entered into said system, the collection priority value is based on a credit score of the customer and an internal payment history score of the customer;

generate a collection prioritization for the outstanding items stored within said system based on ~~uploaded user input~~ the collection priority value assigned to each item;

generate reports of collection activity ~~on~~ associated with the ~~outstanding~~ items;
and

provide a queue of prioritized items to users the collector to drive collection efforts; and

a network interconnecting said server to said computers.

2. (original) A system according to Claim 1 wherein said server is configured to generate a collection priority value based upon at least one of a number of days past due for an item, a value of an item, a customer's total outstanding balance, a customer's credit score, a customer's internal payment history score, a number of days since action due date for an item, and a total number of open items for that customer.

3. (original) A system according to Claim 1 wherein said server is configured to generate an updated collection priority value from uploaded collection data.
4. (original) A system according to Claim 1 wherein said server is configured to determine a time for a next customer contact based on uploaded collection data.
5. (original) A system according to Claim 1 wherein said server is configured with data to preclude a number of items from collection efforts.
6. (original) A system according to Claim 1 wherein said server is configured to upload at least one action code for each item, the action code entered by a user.
7. (original) A system according to Claim 6 wherein said server is configured with action codes for at least one of a proof of delivery sent, an invoice copy faxed, referred to legal collections, referred to adjustments, faxed statement to customer, left a message for customer to call back, spoke with the right person but did not get a promise to pay, received a promise to pay, busy signal, no answer, applied payment and credit memo.
8. (original) A system according to Claim 1 wherein said server is configured to remove an item from said system when the item balance is zero.
9. (currently amended) A system according to ~~Claim 2~~ Claim 1 wherein the customer's internal payment history score is calculated from the equation

$$x_s = \text{Internal Payment History Score} = 2.5 \left[\left(\frac{z_1 - x_1}{a} \right) \left(\frac{z_1}{b} \right) + \left(\frac{z_2}{c} \right) \right]$$

Where,

$$z_1 = \left(\frac{D_1(T_1 + T_2 + T_3)}{9T_1} + \frac{D_2(T_1 + T_2 + T_3)}{9T_2} + \frac{D_3(T_1 + T_2 + T_3)}{9T_3} \right), \text{ normalized average days late}$$

$$z_2 = \left(\frac{[D_3 \log(T_3) - \frac{T_3}{T_2} D_2 \log(T_2)] + [D_2 \log(T_2) - \frac{T_2}{T_1} D_1 \log(T_1)]}{2} \right), \text{ days late trend}$$

and where

a = Worst case number of days beyond the customer's average number of days late,

b = Worst case average days late caused by cyclic markets,

c = Absolute value of the days late velocity from on period to another,

T₁ = Current Period,

T₂ = Previous Period,

T₃ = Prior Period,

D₁ = Current Period,

D₂ = Previous Period, and

D₃ = Prior Period.

10. (original) A system according to Claim 9 wherein a is about 10, b is about 180, and c is about 10.

11. (original) A system according to Claim 1 wherein said server is configured to upload a red alert regarding an item and further configured to send an abuse notice to a user if a red flag has been applied to an item previously within a predetermined period.

12. (original) A system according to Claim 1 wherein said server is configured to generate collector reports on a cycle of at least one of daily, weekly, monthly and quarterly.

13. (original) A system according to Claim 1 wherein said server is configured to prompt a collector action based upon at least one of customer balance, days since letter sent, and time since last customer contact.

14. (currently amended) A system according to ~~Claim 2~~ Claim 1 wherein said server is configured to determine a collection priority value from the equation

$$PV = a_1x_1 + a_2\log(x_2)^{a_7} + a_3\left[\frac{x_2}{\left(\frac{x_3}{y}\right)}\right] + a_4x_4 + a_5x_5 + a_6x_6$$

where:

x_1 = Number of Days Past Due for Item,

x_2 = Value of Item

x_3 = Customer's Total Outstanding Balance

x_4 = Customer's Credit Score

x_5 = Customer's Internal Payment History Score, a trend value derived from the values discussed below

x_6 = Number of Days Since Action Due Date for Item

y = Total Number of Open Invoices for that Customer

and

a_1 = Optimized Coefficient for x_1

a_2 = Optimized Coefficient for x_2

a_3 = Optimized Coefficient for x_3

a_4 = Optimized Coefficient for x_4

a_5 = Optimized Coefficient for x_5

a_6 = Optimized Coefficient for x_6 , and

a_7 = Optimized Coefficient for $\log(x_2)$.

15. (original) A system according to Claim 14 wherein a_1 is about 1.43, a_2 is about 37.37, a_3 is about 11.59, a_4 is about 1, a_5 is about 8.89, a_6 is about 2.69, and a_7 is about 0.95.

16. (original) A system according to Claim 1 wherein said server is further configured to generate a list of items ordered by collection priority value.

17. (original) A system according to Claim 1 wherein said network is at least one of the Internet, an intranet, a local area network (LAN), a wide area network (WAN), dial-in-connections, cable modems and special high-speed ISDN lines.

18. (original) A system according to Claim 1 wherein said server is further configured to show data relating to the efficiency of collection efforts by a collector.

19. (original) A system according to Claim 18 wherein said server is further configured to show data relating to at least one of number of matters referred to a lawyer for collection, number of adjustments, number of invoices faxed, number of statements faxed.

20. (original) A system according to Claim 18 wherein said server is further configured to show data relating to at least one of number of debtors who failed to answer, number of correct debtors contacted, number of messages left, and number of promises to pay received.

21. (currently amended) A system for prioritizing debt collections for a collector having customers with debt, the debt relating to an item acquired by a customer, said system comprising:

means for receiving data relating to items associated with debt collections;

means for producing a collection priority value for an item to be collected, the collection priority value is based on a credit score of the customer and an internal payment history score of the customer;

means for producing a collection priority queue based upon the collection priority value and user input data received, the collection priority queue used for conducting collection activities; and

means for producing a report regarding success an outcome of collection activities.

22. (currently amended) A system according to claim 21 wherein said means for producing a collection priority value comprises use of at least one of a number of days past due for the item, the value of the item, a number of days since an action due date for the item, a total

number of open invoices for a customer, a customer's total outstanding balance, a customer's credit score, and a customer's internal payment history score to calculate the collection priority value.

23. (original) A system according to claim 21 further comprising means for storing data which precludes a number of items from collection efforts.

24. (currently amended) A system according to ~~claim 22~~ Claim 21 wherein the customer's internal payment history score is calculated from the equation

$$x_5 = \text{Internal Payment History Score} = 2.5 \left[\left(\frac{z_1 - x_1}{a} \right) \left(\frac{z_1}{b} \right) + \left(\frac{z_2}{c} \right) \right]$$

Where,

$$z_1 = \left(\frac{D_1(T_1+T_2+T_3)}{9T_1} + \frac{D_2(T_1+T_2+T_3)}{9T_2} + \frac{D_3(T_1+T_2+T_3)}{9T_3} \right), \text{ normalized average days late}$$

$$z_2 = \left(\frac{[D_3 \log(T_3) - \frac{T_3}{T_2} D_2 \log(T_2)] + [D_2 \log(T_2) - \frac{T_2}{T_1} D_1 \log(T_1)]}{2} \right), \text{ days late trend}$$

and where

a = Worst case number of days beyond the customer's average number of days late,

b = Worst case average days late caused by cyclic markets,

c = Absolute value of the days late velocity from one period to another,

T_1 = Current Period,

T_2 = Previous Period,

T_3 = Prior Period,

D_1 = Current Period,

D_2 = Previous Period, and

D_3 = Prior Period.

25. (original) A system according to Claim 22 further comprising means for a user to upload at least one of action codes regarding an item and a red flag regarding an item, said system further comprising means to send an abuse notice to a user if a red flag has been applied to an item previously within a predetermined period.

26. (currently amended) A method for prioritizing debt collections for a collector having customers with debt, the debt relating to at least one item acquired by a customer, said method comprising the steps of:

uploading data to a computer relating to ~~at least one of number of days past due for an item, value of an item, customer's total outstanding balance, customer's credit score, customer's internal payment history score, number of days since action due date for an item, total number of open invoices for that customer~~ items associated with debt collections; and

~~determining~~ calculating a collection priority value ~~based upon the uploaded data and user input for each item uploaded, the collection priority value is based on a credit score of the customer and an internal payment history score of the customer, the calculation is performed by the computer.~~

27. (original) A method according to Claim 26 further comprising the step of determining a time for a next customer contact based on uploaded collection data.

28. (original) A method according to Claim 26 further comprising the step of marking an item with at least one action code regarding the item.

29. (original) A method according to Claim 28 further comprising the step of precluding a number of items from collection efforts, based on an action code.

30. (original) A method according to Claim 28 wherein said step of marking an item with at least one action code further comprises the step of marking an item as at least one of proof of delivery sent, an invoice copy faxed, referred to legal collections, referred to adjustments, faxed statement to customer, left a message for customer to call back, spoke with the right person but did not get a promise to pay, received a promise to pay, busy signal, no answer, applied payment and credit memo.

31. (currently amended) A method according to Claim 26 further comprising the step of removing an item from the computer when a customer's total outstanding balance is zero.

32. (original) A method according to Claim 26 further comprising the step of generating a collections report based upon the uploaded data.

33. (original) A method according to Claim 26 further comprising the step of prompting an action based upon at least one of customer balance, days since letter sent and time since last customer contact.

34. (currently amended) A method according to ~~Claim 33~~ Claim 26 wherein said step of ~~determining~~ calculating a collection priority value further comprises the step of ~~determining~~ calculating a collection priority value ~~from a~~ based on the customer's internal payment history score ~~according to~~ wherein the customer's internal payment history score is calculated from the equation

$$x_5 = \text{Internal Payment History Score} = 2.5 \left[\left(\frac{z_1}{a} \right) \left(\frac{z_1}{b} \right) + \left(\frac{z_2}{c} \right) \right]$$

Where,

$$z_1 = \left(\frac{D_1(T_1+T_2+T_3)}{9T_1} + \frac{D_2(T_1+T_2+T_3)}{9T_2} + \frac{D_3(T_1+T_2+T_3)}{9T_3} \right), \text{ normalized average days late}$$

$$z_2 = \left(\frac{[D_3 \log(T_3) - \frac{T_3}{T_2} D_2 \log(T_2)] + [D_2 \log(T_2) - \frac{T_2}{T_1} D_1 \log(T_1)]}{2} \right), \text{ days late trend}$$

and where

a = Worst case number of days beyond the customer's average number of days late,

b = Worst case average days late caused by cyclic markets,

c = Absolute value of the days late velocity from one period to another,

T₁ = Current Period,

T₂ = Previous Period,

T₃ = Prior Period,

D_1 = Current Period,

D_2 = Previous Period, and

D_3 = Prior Period.

35. (original) A method according to Claim 34 further comprising the step of assigning a at about 10, b at about 180, and c at about 10.

36. (original) A method according to Claim 26 further comprising the step of generating a list of items ordered by collection priority value.

37. (original) A method according to Claim 26 further comprising the step of determining an efficiency of collection efforts.

38. (currently amended) A method according to Claim 26 wherein said step of ~~determining~~ calculating a collection priority value further comprises the step of ~~determining~~ calculating a collection priority value from the equation

$$PV = a_1x_1 + a_2\log(x_2)^{a_7} + a_3 \left[\frac{x_2}{\left(\frac{x_3}{y} \right)} \right] + a_4x_4 + a_5x_5 + a_6x_6$$

where:

x_1 = Number of Days Past Due for Item,

x_2 = Value of Item

x_3 = Customer's Total Outstanding Balance

x_4 = Customer's Credit Score

x_5 = Customer's Internal Payment History Score, a trend value derived from the values discussed below

x_6 = Number of Days Since Action Due Date for Item

y = Total Number of Open Invoices for that Customer

and

a_1 = Optimized Coefficient for x_1

a_2 = Optimized Coefficient for x_2

a_3 = Optimized Coefficient for x_3

a_4 = Optimized Coefficient for x_4

a_5 = Optimized Coefficient for x_5

a_6 = Optimized Coefficient for x_6 , and

a_7 = Optimized Coefficient for $\log(x_2)$

39. (original) A method according to Claim 38 further comprising the step of setting a_1 at about 1.43, a_2 at about 37.37, a_3 at about 11.59, a_4 at about 1, a_5 at about 8.89, a_6 at about 2.69, and a_7 at about 0.95.

40. (original) A method according to Claim 26 further comprising the step of generating a list of debtors rank-ordered by collection priority value.

41. (original) A method according to Claim 26 further comprising the step of generating data relating to the efficiency of collection efforts by a collector.

42. (currently amended) A method according to ~~Claim 26~~ Claim 41 wherein the step of generating data relating to the efficiency of collection efforts by a collector further comprises the step of showing data relating to at least one of time spent preparing an item for collection, calling regarding an item, and time spent on a call.

43. (currently amended) A method according to ~~Claim 26~~ Claim 41 wherein the step of generating data relating to the efficiency of collection efforts by a collector further comprises the

step of generating data relating to at least one of number of matters referred to a lawyer for collection, number of adjustments, number of invoices faxed, and number of statements faxed.

44. (currently amended) A method according to ~~Claim 26~~ Claim 41 wherein the step of ~~showing~~ generating data relating to the efficiency of collection efforts by a collector further comprises the step of showing data relating to at least one of number of debtors who failed to answer, number of correct debtors contacted, number of messages left, and number of promises to pay received.

45. (currently amended) A computer program embodied on a computer-readable medium for prioritizing debt collections for a collector having customers with debt, the debt relating to an item acquired by a customer, said program comprising at least one code segment that:

~~a record of items for collection~~ records data relating to items associated with debt collections;

generates a collection priority value for each item recorded, the collection priority value is based on a credit score of the customer and an internal payment history score of the customer;

~~a plurality of rules for assigning~~ assigns a collection priority value to each item;
and

~~a record of results from applying the matching rules to the items for collection~~
provides a queue of prioritized items to collectors to drive collection efforts based on the collection priority value assigned to each of the items.

46. (original) A computer-readable medium according to claim 45 wherein the collection priority value is calculated from use of at least one of a number of days past due for the item, the value of the item, a number of days since an action due date for the item, a total number of open invoices for a customer, a customer's total outstanding balance, a customer's credit score, and a customer's internal payment history score.

47. (new) A system for prioritizing debt collections for a collector having customers with debt, the debt relating to an item acquired by a customer, said system comprising:

at least one computer;

a server configured to:

receive data from the at least one computer relating to items associated with debt collections;

generate a collection priority value for each item entered into said system, the collection priority value is based on at least one of a number of days past due for an item, a value of an item, a customer's total outstanding balance, a customer's credit score, a customer's internal payment history score, a number of days since action due date for an item, and a total number of open items for that customer, wherein the collection priority value is determined from the equation:

$$PV = a_1x_1 + a_2\log(x_2)^{a_7} + a_3 \left[\frac{x_2}{\left(\frac{x_3}{y}\right)} \right] + a_4x_4 + a_5x_5 + a_6x_6$$

generate a collection prioritization for the items stored within said system based on the collection priority value assigned to each item;

generate reports of collection activity associated with the items; and

provide a queue of prioritized items to users to drive collection efforts; and

a network interconnecting said server to said computers,

where:

x_1 = Number of Days Past Due for Item,

x_2 = Value of Item,

x_3 = Customer's Total Outstanding Balance,

x_4 = Customer's Credit Score,

x_5 = Customer's Internal Payment History Score, a trend value derived from the values discussed below,

x_6 = Number of Days Since Action Due Date for Item,

y = Total Number of Open Invoices for that Customer,

and

a_1 = Optimized Coefficient for x_1 ,

a_2 = Optimized Coefficient for x_2 ,

a_3 = Optimized Coefficient for x_3 ,

a_4 = Optimized Coefficient for x_4 ,

a_5 = Optimized Coefficient for x_5 ,

a_6 = Optimized Coefficient for x_6 , and

a_7 = Optimized Coefficient for $\log(x_2)$.

48. (new) A system for prioritizing debt collections for a collector having customers with debt, the debt relating to an item acquired by a customer, said system comprising:

at least one computer;

a server configured to:

receive data from the at least one computer relating to items associated with debt collections;

generate a collection priority value for each item entered into said system, the collection priority value is based on at least one of a number of days past due for an item, a value of an item, a customer's total outstanding balance, a customer's credit score, a customer's internal payment history score, a number of days since action due date for an item, and a total number of open items for that customer, wherein the customer's internal payment history score is calculated from the equation:

$$x_5 = \text{Internal Payment History Score} = 2.5 \left[\left(\frac{z_1 - x_1}{a} \right) \left(\frac{z_1}{b} \right) + \left(\frac{z_2}{c} \right) \right]$$

Where,

$$z_1 = \left(\frac{D_1(T_1+T_2+T_3)}{9T_1} + \frac{D_2(T_1+T_2+T_3)}{9T_2} + \frac{D_3(T_1+T_2+T_3)}{9T_3} \right), \text{ normalized average days late}$$

$$z_2 = \left(\frac{[D_3 \log(T_3) - \frac{T_3}{T_2} D_2 \log(T_2)] + [D_2 \log(T_2) - \frac{T_2}{T_1} D_1 \log(T_1)]}{2} \right), \text{ days late trend}$$

generate a collection prioritization for the items stored within said system based on the collection priority value assigned to each item;

generate reports of collection activity associated with the items; and

provide a queue of prioritized items to users to drive collection efforts; and

a network interconnecting said server to said computers,

where:

a = Worst case number of days beyond the customer's average number of days late,

b = Worst case average days late caused by cyclic markets,

c = Absolute value of the days late velocity from one period to another,

T₁ = Current Period,

T₂ = Previous Period,

T₃ = Prior Period,

D_1 = Current Period,

D_2 = Previous Period, and

D_3 = Prior Period.